

February 10, 2022

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency
DWPC Marion Region
2309 West Main Street
Marion, Illinois 62959

**Discharge Monitoring Report for January 2022
(Permit No. 2020-EP-65299)
Pump and Treat System
Crab Orchard National Wildlife Refuge, Marion, Illinois**

Dear Sir or Madam:

AECOM, on behalf of the United States Fish and Wildlife Service (USFWS), is submitting the attached January 2022 Discharge Monitoring Report (DMR) for the subject treatment system located on the Crab Orchard National Wildlife Refuge (CONWR) in Marion, Illinois. This DMR has been prepared as required by the Permit to Construct, Own, and Operate (Permit No. 2020-EP-65299), dated July 10, 2020, for discharge to the City of Marion, IL publicly owned treatment works (POTW). Discharge of the treated effluent of the Pump and Treat System to the Marion POTW commenced on May 4, 2011. Due to a technical issue, totalizer and daily flow data were not recorded on January 1st – 5th. These values were estimated using existing totalizer values. To remedy the technical issue, the system was shut down from January 10th @ 1032 to January 24th @ 1353 to facilitate an equipment replacement. The enclosed discharge summary was used to prepare the DMR.

Please contact Mr. Brooks Pfeiffer (314.429.0100) with any questions.

Sincerely,



Brooks Pfeiffer
Senior Technician
AECOM

encl: DMR
Discharge Summary

cc: *(via electronic mail)*
Viral Patel, USFWS
Paul Lake, IEPA
Leanne Moore, USFWS Project Coordinator
Chuck Beasley, USFWS
Brent Cain, City of Marion POTW

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Form Approved

OMB No. 2040-0004

NAME USFWS
Crab Orchard National Wildlife
Refuge
ADDRESS 8588 Route 148
Marion, IL 62599

DISCHARGE MONITORING REPORT (DMR)

2020-EP-65299	to POTW
PERMIT NUMBER	DISCHARGE NUMBER

FACILITY Crab Orchard National Wildlife
LOCATION Refuge Superfund Site

MONITORING PERIOD								
YEAR		MO	DAY	TO	YEAR		MO	DAY
2022		01	01		2022		01	31

NOTE: Read instructions before

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow, Total Daily Volume	SAMPLE	2,986	5,029	gpd					0	Daily	Cont
	PERMIT REQUIREMENT	7,200	14,400							Daily	Cont
Flow, Daily Average Rate	SAMPLE	2.21	4.07	gpm					0	Daily	Cont
	PERMIT REQUIREMENT	Report	Report							Daily	Cont
pH, Standard Units	SAMPLE				7.19		7.19	s.u.	0	1/mo	Grab
	PERMIT REQUIREMENT				5.5		9.5			1/mo	Grab
Polychlorinated Biphenyls, total	SAMPLE				< 0.00044	< 0.00044	< 0.00044	mg/L	0	1/mo	Grab
	PERMIT REQUIREMENT						0.003			1/mo	Grab
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	TELEPHONE		DATE		
Brooks C. Pfeiffer		314	429.0100	2022	02	10
TYPED OR PRINTED		AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Operated under the supervision of Brooks Pfeiffer, Class K Operator - Crab Orchard Pump and Treat System

Crab Orchard National Wildlife Refuge
Permanent Pump and Treat System
Discharge Summary - January 2022
AECOM Project Number: 60669120

January 2021	Flow (gpm)	Totalizer (gal)	Total Flow (gpd)	Effluent		Comments
				Total PCBs (mg/L)	pH (s.u.)	
1/1/2022	4.02	17,654,982	5,791			flow values estimated using existing totalizer values
1/2/2022	4.02	17,660,773	5,791			flow values estimated using existing totalizer values
1/3/2022	4.02	17,666,564	5,791			flow values estimated using existing totalizer values
1/4/2022	4.02	17,672,355	5,791			flow values estimated using existing totalizer values
1/5/2022	4.02	17,678,086	5,791			flow values estimated using existing totalizer values
1/6/2022	4.07	17,683,937	5,851			
1/7/2022	4.04	17,689,788	5,817			
1/8/2022	4.01	17,695,605	5,805			
1/9/2022	4.01	17,701,410	5,808			
1/10/2022	4.01	17,707,218	2,534	< 0.00044	7.19	system off-line for equipment repair @ 1032
1/11/2022	0.00	17,709,752	0			
1/12/2022	0.00	17,709,752	0			
1/13/2022	0.00	17,709,752	0			
1/14/2022	0.00	17,709,752	0			
1/15/2022	0.00	17,709,752	0			
1/16/2022	0.00	17,709,752	0			
1/17/2022	0.00	17,709,752	0			
1/18/2022	0.00	17,709,752	0			
1/19/2022	0.00	17,709,752	0			
1/20/2022	0.00	17,709,752	0			
1/21/2022	0.00	17,709,752	0			
1/22/2022	0.00	17,709,752	0			
1/23/2022	0.00	17,709,752	0			
1/24/2022	3.71	17,709,752	2,252			system returned back on-line @ 1353
1/25/2022	3.60	17,712,004	5,184			
1/26/2022	3.58	17,717,188	5,151			
1/27/2022	3.50	17,722,339	5,079			
1/28/2022	3.50	17,727,418	5,057			
1/29/2022	3.50	17,732,475	5,029			
1/30/2022	3.50	17,737,504	5,020			
1/31/2022	3.50	17,742,524	5,029			
Data Summary	Flow (gpm)	Totalizer (gal)	Total Flow (gpd)	Effluent		Comments
				Total PCBs (mg/L)	pH (s.u.)	
Minimum	0.00	17,654,982	0	< 0.00044	7.19	
Average	2.21	17,704,474	2,986	< 0.00044	7.19	
Maximum	4.07	17,742,524	5,029	< 0.00044	7.19	

Notes:

gpm - gallons per minute
gal - gallons
gpd - gallons per day
PCBs - polychlorinated biphenyls
mg/L - milligrams per liter
< - analyte not detected
s.u. - standard units